



**DEPARTMENT OF MINES
WESTERN AUSTRALIA**

SIGNIFICANT INCIDENT REPORT NO. 7

CHEMICAL HANDLING – CAUSTIC BURN

INCIDENT

A tanker driver received serious burns from caustic solution after transfer of the solution from the tanker to the mine-site storage tank had been completed. This occurred while disconnecting the Kamlock fitting to release the discharge hose on top of the tanker.

A safety shower was located adjacent to the storage tank but this was not used.

CAUSE

The principal cause of this accident was that the correct procedure was not followed, i.e. the tanker had not been completely vented before the discharge hose was disconnected, and the discharge valve was still open. There was sufficient air pressure to force residual caustic soda solution up the discharge pipe onto the driver. The accident was further compounded as the driver was not wearing protective clothing which was available in a kit bag in the tanker cabin.

Flowing water from a hose pipe was not applied to the affected skin until more than 15 minutes after being splashed by the caustic.

No on-site observer was in attendance when the driver was disconnecting.

COMMENTS AND PREVENTATIVE ACTION

1. Correct written disconnecting procedures must be followed.
2. An on-site observer must remain in attendance when a driver unloads all corrosive chemicals, acids and alkalis.
3. The observer must familiarise the driver with the safety showers prior to commencement of operation.
4. The driver must wear protective safety clothing, i.e., hard hat with face shield, PVC overalls, long PVC gloves, safety boots. Unloading must not begin until these precautions have been taken.
5. The observer must not leave the area until the unloaded vehicle departs.
6. Safety showers are to be regularly inspected and be in good working order.

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